Targets

Office of Secretary of Defense

Director of Operational Test and Evaluation

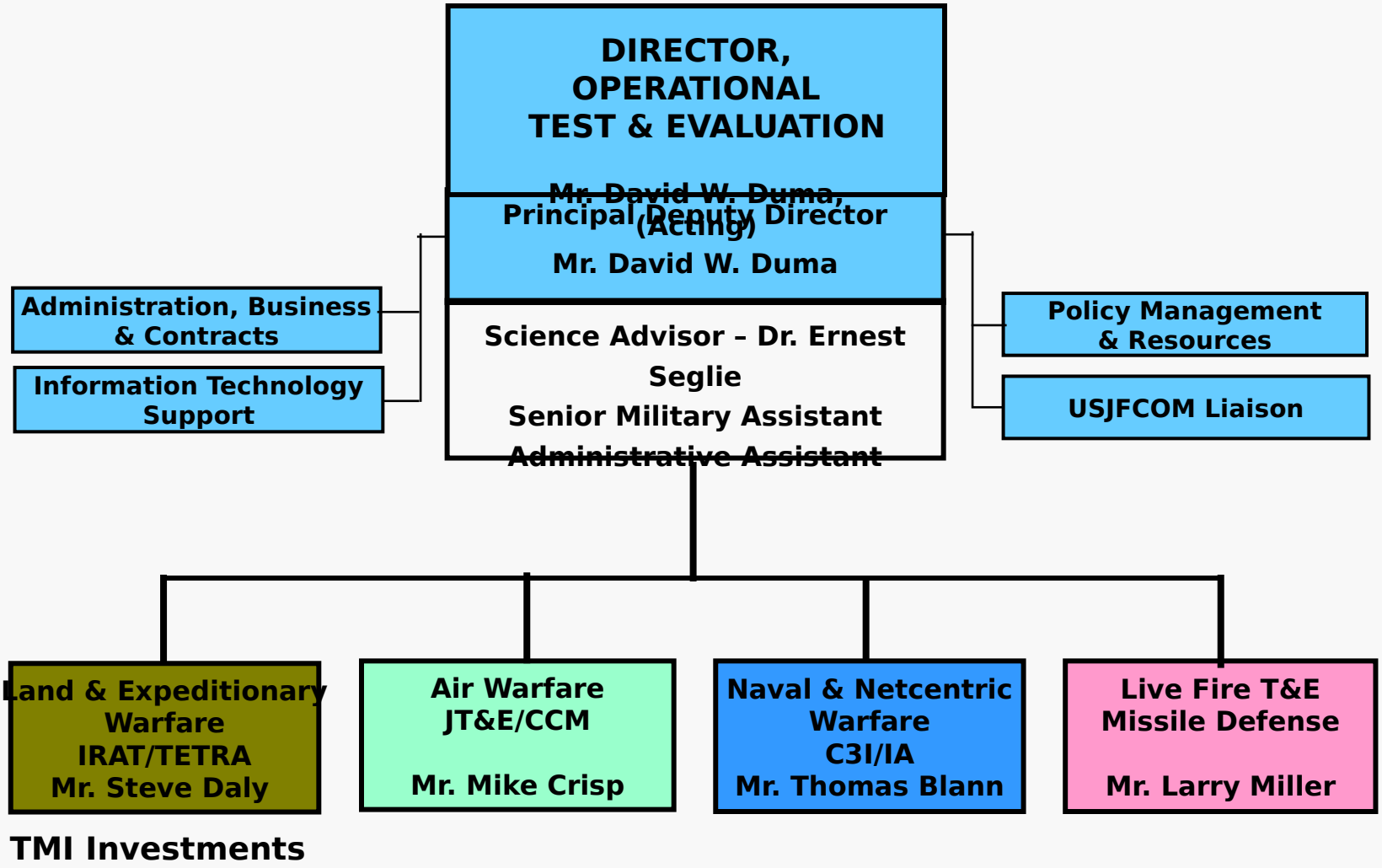
Office of Deputy Director for Land Warfare

Target Systems Office - Dennis Mischel

OVERVIEW

- ***Changes within DOT&E***
- ***Defense Science Board Recommendations***
- ***DOT&E Additional Target Concerns***
- ***Target Management Initiative Investments***

DOT&E
Organizational Changes



TMI Investments

DTRMC Primary Functions and DOT&E Investment Changes

Defense Test Resource Management Center

Dr. John Foulkes – Director

Mr. Richard Lockhart – Deputy, Director

Strategic Planning

- Develop & maintain 10-year Strategic Plan
- Prepare Report for SecDef

Budget Certification

- Review/oversee budgets & expenditures for MRTFB & all other T&E facilities
- Certify budgets & report to SECDEF

Joint Investment Programs

- Administer CTEIP
- Administer DoD T&E/S&T

MRTFB Policy & Oversight

- DoDD 3200.11
  - Charging Policy
  - MRTFB Composition

Legislated Functions

Functions Transferring From DOT&E

Defense Science Board Recommendations

THE BIG THREE ISSUES:

- Supersonic Anti-Ship Targets
- Target Control
- Full Scale Aerial Target

STATUS
(DOT&E Perspective)

Supersonic Anti-Ship Targets

DSB Recommendation

1. **Produce the GQM-163 A as the principal sea-skimming target.**
2. **Continue attempts at foreign acquisition of MA-31 for supersonic high-dive threat. Develop a backup strategy for domestic development and production of a high diver target.**
3. **Immediately initiate a limited production of a Threat-D surrogate. A "skunk works" approach is recommended.**

STATUS

1. **In Production**
2. **Foreign Material Acquisitions are typically problematic.**
   - **FY06 DOTE/Navy High Diver Target Study.**
3. **Threat D is currently under concept exploration.**
   - **Separation Event**
   - **Acceleration/Velocity Profile**

A "skunk works" approach is recommended:

- **DOT&E Focus for FY06/07.**

Target Control

DSB Recommendation

DoD Test Resource Management Center (DTRMC), working with the Services, should develop and ensure support of a plan for transition to a common target control system.

- **Service "Buy-In" is critical**
- **Transition can be gradual**
- **Goal: "shoot any target on any range"**

Status

- **DTRMC accepted tasking.**
- **FY05/06 DOT&E/Tri-Service Mobile Ground Target initiatives may be provide a structure for long term solution.**
  - **Based upon an open systems architecture, standard message formats and protocols.**
  - **Control system study identified JTTCS hardware as host platform**

Hardware
- **PC Based**
- **Portable**
- **Open Architecture**

Software
- **Mathlab/Simulink**
- **TVARTS**
- **Standard Formats & Protocols**

Full Scale Aerial Target

DSB Recommendations

1. *Produce a drone using an existing aircraft platform (F-16 or foreign F-4) to satisfy mid-term needs.*
2. *Try to eliminate the man-rating requirement (ground transportable)*
3. *Begin concept demonstration of new advanced aerial target (unmanned to satisfy long-term needs.*

Is Business as Usual Acceptable?

Old Retired Military Aircraft

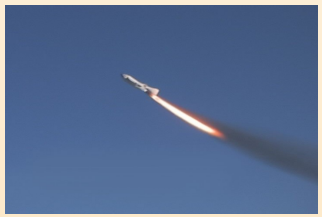
F-16
- **Supersonic**
- **Manned**
- **70's Vintage**

BAE/Scaled
- **New Design**
- **Supersonic**

TMI Cost Study
- **Based on JSF**
- **Supersonic**
- **$2.7M + engine**
- **<<$100M NRE**

Eclipse Aviation
- **$1.4 M Unit Cost**
- **Subsonic**
- **Manned**

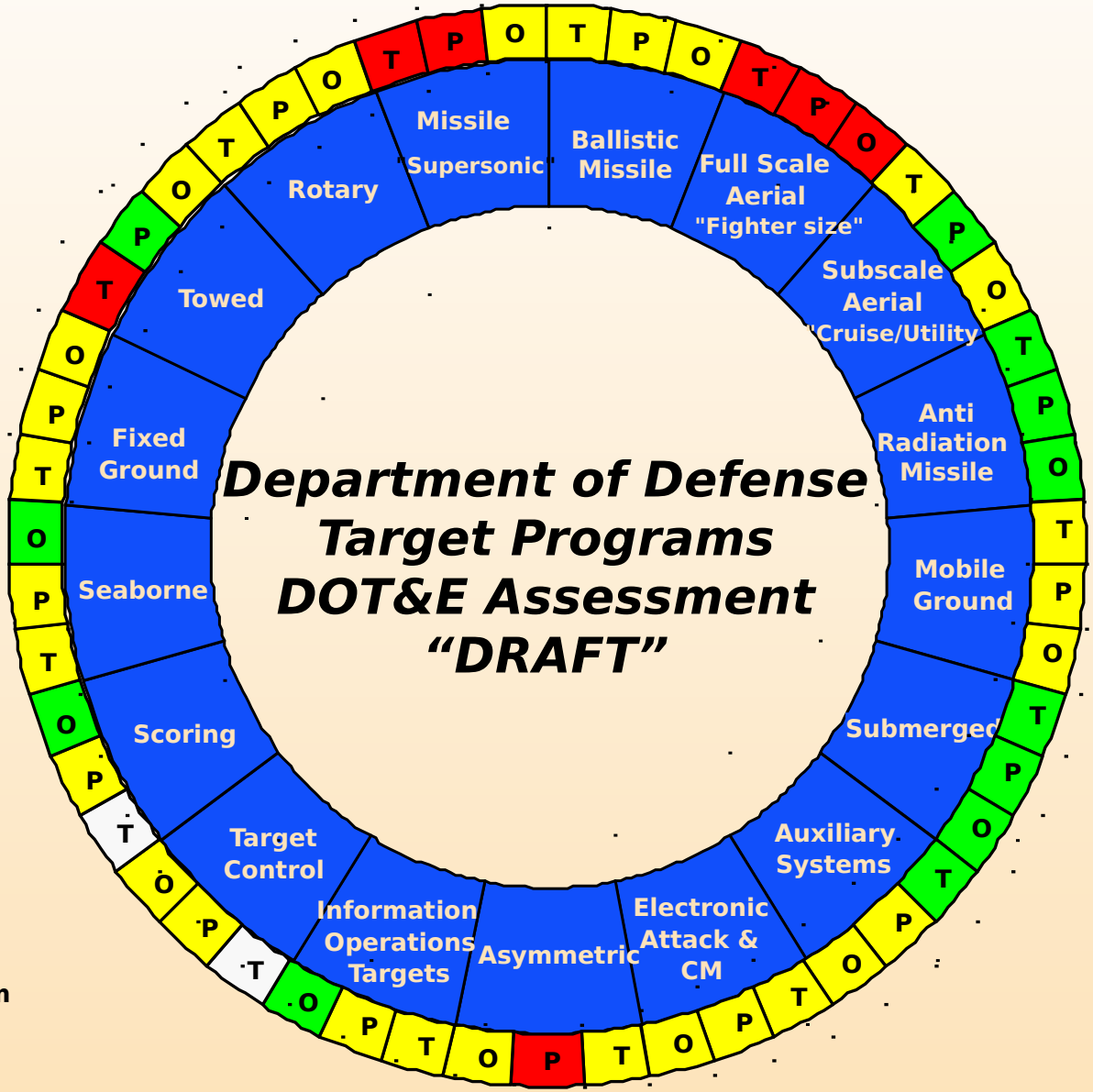
Aviation Technology
- **$2.8M Unit Cost**
- **High Subsonic**
- **Manned**



Scaled Composites
- $20/30M NRE
- Unique Mission
- Subsonic and Supersonic

What are the requirements?

DOT&E Additional Concerns



T - Threat Realism
P - Procurement
O - Other

Red – Critical Issue
Yellow – Concern
Green – No Significant Issue

TMI Program FY06 Investments

- **Developmental (Focused on Multi-Service Issues)**
  - Surface Target Vector Scoring
  - Subscale Target, Common Control, Alternative Launch
  - Improvised Explosive Devise Test Target
  - Full Scale Aerial Target (?)
- **Studies and Analysis**
  - Mobile Ground Targets
  - Air Force Academy Studies
  - Target Control Bandwidth Study
  - Full Scale Target Engines
  - Subscale Launch Capability
  - Reactive Coatings
  - Rotary Wing Target Requirements
  - Satellite Emulation Target
  - Information Operations Targets
  - Quick Reaction Studies
- **FY07 Focus Areas**
  - GPM-16s Air Launched Study
  - DSB Recommendations
  - Target Issues – Alternatives Low Cost Materials
  - Technology Insertions (Scoring, Control Systems, Materials, etc)

Summary

Significant improvements over the past year

- ***GQM-163 is in production***
- ***BQM-167 is in production***
- ***AST Agreement***
- ***Standup of DTRMC***

Defense Science Board

- ***Aerial Target Recommendations to AT&L***

OSD Target Investments

- ***DTRMC/CTEIP***
- ***DOT&E/TMI***

DOT&E Target Concerns

- ***Interoperability***
- ***Target Threat Realism***
- ***Presentation Cost (Unit cost, launch cost***